



**Dr. David Koch**  
**Astrophysicist**

NASA Ames Research Center

I think of ideas for space missions and search for Earth-size planets around other Sun-like stars.

## Areas of expertise:

- Extra solar planet detection
- Space flight scientific instruments and missions

## How I first became interested in this profession:

In addition to always liking mathematical problems, I leaned toward scientific research as a child because my father was a professor of biochemistry. When I was in college, at the time of the Apollo program, I got to work in a space physics lab which was very exciting for me.

## What helped prepare me for this job:

A strong background in math and physics, and the ability to write computer programs have been very useful to me.

## My role models or inspirations:

My father, a research scientist, was a role model for me, as were the professors I've worked with.

## My education and training:

- B.S. in Applied Mathematics and Engineering Physics, University of Wisconsin-Madison
- M.S. and Ph.D. in Physics, Cornell University

## My career path:

- Senior scientist at the American Science and Engineering for six years.
- Astrophysicist at the Smithsonian Astrophysical Observatory for 12 years.
- Astrophysicist at NASA Ames Research Center for 12 years.

## What I like about my job:

As a research scientist, I get to pick and choose the research that I do. If I don't like what I'm doing today, I can do something different tomorrow. I study what is interesting to me. Also, the goal of any research scientist is to learn something new about the universe that was never known before. It's exciting to be the first one to know something new. Afterwards, it may turn out to be important enough to become part of the human knowledge base for future generations.

## What I don't like about my job:

I spend a lot of my time carrying out the requirements of my job that have nothing to do with accomplishing scientific goals.

## My advice to anyone interested in this occupation:

Get a good education in math and physics. You should also have a knack for what makes things work. Try taking things apart and putting them back together to see how they work. To be a research scientist, you need to be a tinkerer.